

95363

C02150



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

Contract No.: 50005
 TECHN.PROTOCOL № 210-06 SPEC.№0431/PO21944
 ASTM A182/A182M-05; ASME SA-182/SA-182M-04; ASTM A276-04;
 ASTM A479/A479M-04; ASTM SA-479/SA-479M-04; ASTM A484/A484M-05; AMS-QQ-S-763A-03
 Cond.A; NACE MR 0175-2003; AMS 5648K-02; AMS 5653F-02; ASTM A193/A193M-04c GR B8M, CL1 ; (EXC PAR 6.3)
 ASME SA-193/SA-193M-04GR B8M, CL1 (EXC PAR 6.3)

EN10204/3.1

Sheets: 11 Sheet: 9
 QUALITY CERTIFICATE Nr. 238155
 PLANT ORDER № 8014900431

CUSTOMER
 „DSS INTERNATIONAL SA“
 Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионно-стойких (нержавеющих) сталей горячекатаные обточенные на линии Ландграф.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 6.250in/158.75 mm L=3.40-5.50m/11.15-18.03ft
 Grade: 316/F316/316L/F316L

QUANTITY:
 (number of pcs) 1bund Q-1601 lb/726 kg

Delivery condition
 solution annealed :1900-2010⁰ F(1040-1100⁰ C)/water
 термообработка: закалка в воду

ANALYSES, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂		
REQUIRED	<.030	<1.00	1.25-2.00	<.040	.020-.030	16.00-18.00	10.00-14.00	2.00-3.00	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
HEAT № 95363	.030	.33	1.37	.033	.033	16.92	10.10	2.05	.056	.23	.06	.13	.08	.07	.016	.027		

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{0.2})	Tensile Strength, Rm, ksi (N/mm ²)	Elongation		Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J
			in 2 inches (50mm) or 4D, min, % (ASTM A370)				
REQUIRED	36(248)	75 (515)	45	50	140-223	100	
EFFECTIVE	40.5(278)	81.1(557)	59	76	167	298	

TECHNICAL REQUIREMENTS:
 Macrostructure – GOOD
 GRAIN SIZE : 5 to ASTM E 112
 Nonmetallic inclusions ASTM E 45 (Method A)

A		B		C		D	
thin	thick	thin	thick	thin	thick	thin	thick
2.0	1.0	2.0	1.5	0.0	0.0	1.0	1.0

ICC-ASTM A262-02a(Method E)-test: O.K.
 „Dimension/surface defects test, anti-mixing test – O.K.“
 Ratio of reduction- 14.3:1



Mechanical properties tested in state of delivery

US - testing yes Results: SEP 1921, 3/ Dd - O.K.

Radiation free; mercury free. No Weld or Weld repair.

Manufacturer: JSC DNEPROSPETSSTAL
 Date: 28.09.10 Signed: *[Signature]*
 Zaporozhye
 Made in Ukraine.

